

## Claims

Having thus described our invention, we claim the following to be new and desire to secure by Letters Patent that which is set forth in the following claims. We Claim:

1. A method for translating the contents of a binary data record existing in a programming language to a component in an object-oriented programming system comprising the steps of:

- (a) determining a data record layout of a binary data record in an architecture-specific program, said data record layout comprising a name component and a contents component,
- (b) associating a first reference to said name component and a second reference to said contents component of said data record layout, said first and said second references operating as address parameters to allow a programming interface to select said name component and said contents component from said data record layout in response to a data request,
- (c) modifying said architecture-specific program to include said first and said second references for use by said programming interface, and
- (d) generating source code for a software component of an object-oriented programming system, said software component being adapted to send to said programming interface said data request for the content of said binary data record associated with said reference, and said software component being adapted to receive from said programming interface a response to said data request.

1           2. The method as claimed in claim 1 wherein said identifying step further comprises  
2 translating the source code of said architecture-specific program to a language-neutral  
3 representation including the hierarchical structure of said architecture-specific program.

4           3. The method as claimed in claim 1 wherein said associating step further  
5 comprises a published programming interface to allow multiple programming languages  
6 to connect with an interprocess communications mechanism to deliver said name  
7 component of said record layout and an architecture-specific binary data record to said  
8 software component.

9           4. The method as claimed in claim 1 wherein said modifying step further comprises  
10 a base component from which generated source code can be derived using object-  
11 oriented inheritance language constructs.

12           5. The method as claimed in claim 2 wherein an architecture-specific program  
13 source code (having a data element) is parsed to create a language neutral  
14 representation of said data element where the result of the parsing is stored in a  
15 persistent storage medium such as a relational database or a file system.

16           6. The method as claimed in claim 1 whereas wherein said generating step further  
17 comprises dynamically invoking a compiler to convert said source code of said software  
18 component into a binary form.

- 1        7. The method as claimed in claim 6 further comprising a software to load said
- 2        generated binary form into memory for use.

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